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October 3, 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**VIA HAND DELIVERY**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

Re: Amendment of Part 90 of the  
Commission's Rules Concerning  
Private Land Mobile Radio Services  
WT Docket No. 97-153

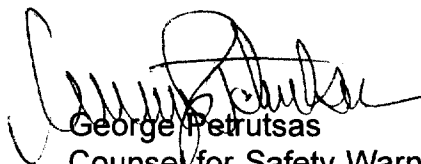
Dear Mr. Caton:

On behalf of Safety Warning Systems L.C., we are filing an original and  
fourteen (14) copies of its Comments in the above-referenced rulemaking proceeding.

Please communicate with us if you need further information.

Very truly yours,

FLETCHER, HEALD & HILDRETH, P.L.C.



George Petrusas  
Counsel for Safety Warning Systems L.C.

GP:cej  
Enclosures

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BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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In the Matter of )  
)  
Amendment of Part 90 of the )  
Commission's Rules Concerning )  
Private Land Mobile Radio )  
Services )  
)

WT Docket No. 97-153  
RM-8584  
RM-8623  
RM-8680  
RM-8734

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**COMMENTS OF  
THE SAFETY WARNING SYSTEMS, L.C.**

Safety Warning Systems, L.C. ("SWS"), by counsel, submits its comments in response to the Commission's Notice of Proposed Rulemaking (NPRM) in the above-referenced proceeding. The NPRM addresses several subjects concerning the Private Land Mobile Radio Services. SWS is interested in the Commission's proposal under the heading, RM-8734 - Safety Alerting Signals at 24 GHz, discussed in Paragraphs 8-12 of the NPRM, which would adopt the proposals in RM-8734, the Petition for Rulemaking filed by Radio Association Defending Airwave Rights ("RADAR") on October 24, 1995. SWS is a Florida corporation and it is developing the safety warning system proposed in RM-8734.

**I. The Commission's Proposal in  
Paragraph 11 of the NPRM is fully supported**

In Paragraph 11 of its NPRM, the Commission proposes to grant the proposals made by RADAR in its Petition for Rulemaking, RM-8734, to amend the rules in Part 90 governing the Public Safety Radio Services as well as Section 90.103(c)(22),

governing the Radiolocation Service, to permit the operation of radio transmitters at fixed locations and in emergency vehicles that would transmit on the frequency 24.10 GHz unmodulated continuous wave (NON emission) as well as modulated FM digital signals for the purpose of alerting motorists to hazardous driving conditions. The Commission would include the former Emergency Medical Radio Service in the proposal so that non-governmental licensees in that service would also be permitted to operate safety warning transmitters in emergency vehicles. SWS fully supports the Commission's proposal. SWS agrees with the Commission's conclusion that authorizing the operation of the proposed safety warning system would promote traffic safety and would serve well the public interest. As noted in RADAR's Petition for Rulemaking, over 600 persons were killed in 1993 in automobile accidents near construction or road maintenance zones. Nearly one hundred persons were killed in that same year in accidents involving emergency vehicles rushing to the scene of emergencies. Many of those accidents can be prevented by alerting the motorists of the hazard in time and cause them to reduce speed.

The proposed safety warning system would take advantage of the millions of radar detectors already in the hands of the American motoring public and, therefore, can be implemented quickly and economically. The system would be reliable and effective. The messages would be presented in a display near the driver and would be received well in advance of the arrival of the vehicle in the danger zone. As radar detectors are improved, messages identifying the exact nature and source of the danger would be displayed, which would cue the driver to be alert for the indicated

danger. The message would be received under almost any conditions; day or night, in fog or in clear weather, in high noise environment, with the car radio on or off or with the air condition or heating system operating, with the car windows open or closed. The digital signal would almost always get through.

In sum, adoption of the proposal would provide state and local governments with an economical and highly effective means for alerting motorists of the many highway hazards and would enhance their continuous efforts to reduce accidents and save lives. The public interest would be well served.

II. Railroads should also be authorized  
to operate safety warning transmitters  
near railroad crossings

The Commission's proposal would confine the authority to operate the safety warning transmitters to public safety licensees. However, SWS believes that the objectives of the proposal would be more fully achieved by also authorizing railroad entities to operate those transmitters on locomotives or near railroad crossings. As noted in RM-8734, more than 4,000 accidents, involving motor vehicles, occurred at railroad crossings in 1993. See RM-8734, p. 7, note 4. Many of those accidents could also be prevented by alerting motorists about to cross a railroad crossing that a train is approaching.

In sum, authorizing railroad entities to operate safety warning transmitters would be consistent with the Commission's overall objective in the proceeding and would further enhance safety.

III. Results of experimental operations confirm that the proposed safety warning system is technically sound.

The results of extensive tests of the proposed safety warning system and a thorough analysis of those results submitted in support of the petition RM-8734 demonstrated, among other things, that the operation of that system would be compatible with and would not interfere with properly operated police radars. See RADAR's Supplementary Comments and Attachment A thereto, filed in RM-8734 on March 22, 1996. Further tests are being conducted under SWS's experimental license (Station KS2XAR). These tests confirm that the proposed safety warning system is technically sound and indicate that there are over sixty (60) possible viable safety message applications for the system. Those tests will be continued and further reports will be submitted to the Commission pursuant to the requirements of Part 5 of the Commission's Rules. The results thus far demonstrate, however, that the safety warning system SWS is developing is technically sound. Further, the system is designed with a capability for variable text messaging with the ability to transmit up to 64 characters. For example, information could be plugged in "Accident ahead - Exit 4" or "chemical spill at Broad Street and 59th St".

IV. The proposal to permit traffic light control in the 24.20-24.25 GHz band is unnecessary.

While SWS understands, appreciates and concurs with the Commission's objectives in proposing to permit the use of the 24.20-24.25 GHz band for traffic light control purposes, SWS respectfully submits that the proposal is unnecessary,

possibly troublesome, and should not be adopted. As an alternative, SWS suggests that the Commission expand somewhat its basic proposal so as to permit transmission of signals for traffic light control purposes as one more function of the safety warning system. Such additional use of that system can be accomplished by adding one or more digital codes in the warning signal specifically designed to trigger the traffic light changing mechanism. Such a function would be consistent with the overall objective of the safety warning system. Thus, authorized drivers of emergency vehicles such as police, fire and ambulances, using a single transmitter, would be able to warn motorists of their approach and, if necessary, change the traffic light as they approach the intersection. Under the Commission's proposal, they would need a second transmitter for traffic light control purposes.

Moreover, signals in the 24.20-24.25 GHz band transmitted under Commission's proposal to change traffic lights would activate radar detectors in the vicinity, since detectors (now, some 20 millions in the hands of the public) detect signals in the entire 24.05-24.25 GHz band. Such triggering could result in confusion on the part of the motorists and could lead to loss of confidence in the safety warning system.<sup>1</sup>

For the foregoing reasons, the Commission is urged to authorize traffic light control as one of the function of the safety warning system and not adopt its proposal

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<sup>1</sup>It is noted that far more extensive traffic management purposes, state and local governments will continue to have access to 150 MHz of spectrum in the 31 GHz band under the Commission's Second Report and Order in CC Docket 92-297, FCC 97-82, released March 13, 1997, Para. 80-84.

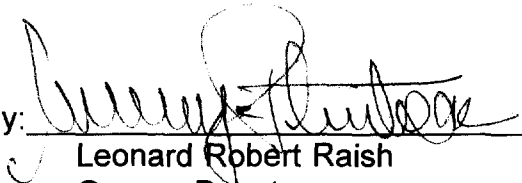
to permit traffic light control in the 24.20-24.05 GHz band.

V. Conclusion

SWS supports the Commission's proposal to authorize the operation of the proposed safety warning system on the frequency 24.10 GHz. The public interest would be eminently served by the early adoption of the proposal. Equipment has been developed and tests have demonstrated that the proposed system is technically sound and can be placed in operation quickly and at relatively low cost. Additionally, SWS recommends that the Commission expand its proposal so as to allow the transmission of signals for traffic light control purposes as an additional function of the safety warning system and not to adopt its proposal to permit the use of the 24.20-24.25 GHz portion of the band for that purpose.

Respectfully submitted.

SAFETY WARNING SYSTEMS, L.C.

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